

WHAT IS CLAIMED IS:

1. A blended monolayer thermoplastic film for use in high temperature cooking applications comprising:
from about 90 to about 10 weight percent, based on the total weight of said blended monolayer thermoplastic film, of thermoplastic elastomer block copolymers; and
from about 10 to about 90 weight percent, based on the total weight of said blended monolayer thermoplastic film, of non-elastic polyesters;
said high temperature cooking applications occurring at from about 212 degrees Fahrenheit to about 400 degrees Fahrenheit.
2. The blended monolayer thermoplastic film of claim 1, wherein said blended monolayer thermoplastic film has a tensile yield strength of at least 2900 pounds per square inch.
3. The blended monolayer thermoplastic film of claim 1, wherein said blended monolayer thermoplastic film provides an oxygen barrier having a permeability coefficient of less than about 100 cc-mil per hundred square inches per day.
4. The blended monolayer thermoplastic film of claim 1, wherein said blended monolayer thermoplastic film provides a water vapor barrier having a transmission coefficient of less than about 20 gms/100 in²/day.
5. The blended monolayer thermoplastic film of claim 1, wherein said blended monolayer thermoplastic film is capable of being star sealed.
6. The blended monolayer thermoplastic film of claim 1, wherein said thermoplastic elastomer block copolymers are selected from a group consisting of polyester-ester block copolymers, polyether-ester block copolymers, or combinations thereof.
7. The blended monolayer thermoplastic film of claim 1, wherein said non-elastic polyester is a reaction product of a carboxylic acid and a diol.

8. The blended monolayer thermoplastic film of claim 1, wherein the non-elastic polyester is polybutylene terephthalate.

9. The blended monolayer thermoplastic film of claim 1, wherein said blended monolayer thermoplastic film comprises up to about 60 weight percent of non-elastic polyesters, and at least about 40 weight percent of thermoplastic elastomer block copolymers, based on the total weight of said blended monolayer thermoplastic film.

10. The blended monolayer thermoplastic film of claim 1, wherein said blended monolayer thermoplastic film comprises about 50 weight percent of non-elastic polyesters and about 50 weight percent of thermoplastic elastomer block copolymers, based on the total weight of said blended monolayer thermoplastic film.

11. A multi layer thermoplastic film comprising:

a first layer comprising from about 90 to about 10 weight percent, based on the total weight of said thermoplastic film, of thermoplastic elastomer block copolymers; and

a second layer comprising from about 10 to about 90 weight percent, based on the total weight of said thermoplastic film, of non-elastic polyesters.

12. The multi layer thermoplastic film of claim 11, wherein said multi layer thermoplastic film has a tensile yield strength of at least 4000 pounds per square inch.

13. The multi layer thermoplastic film of claim 11, wherein said multi layer thermoplastic film provides a water vapor barrier having a transmission coefficient of less than about 20 gms/100 in²/day.

14. The multi layer thermoplastic film of claim 11, wherein said multi layer thermoplastic film provides an oxygen barrier having a permeability coefficient of less than 100 cc-mil per hundred square inches per day.

15. The multi layer thermoplastic film of claim 11, wherein said thermoplastic elastomer block copolymers are selected from a group consisting of polyester-ester block copolymers, polyether-ester block copolymers, or combinations thereof.
16. The multi layer thermoplastic film of claim 11, wherein said non-elastic polyester is the reaction product of a carboxylic acid and a diol.
17. The multi layer thermoplastic film of claim 11, wherein the non-elastic polyester is polybutylene terephthalate.
18. The multi layer thermoplastic film of claim 11, wherein said multi layer thermoplastic film comprises up to about 75 weight percent of non-elastic polyesters, and at least about 25 weight percent of thermoplastic elastomer block copolymers, based on the total weight of said multi layer thermoplastic film.
19. The multi layer thermoplastic film of claim 11, wherein said film comprises about 50 weight percent of non-elastic polyesters and about 50 weight percent of thermoplastic elastomer block copolymers, based on the total weight of said multi layer thermoplastic film.
20. The multi layer thermoplastic film of claim 11, wherein said first layer comprises an interior film layer and said second layer comprises an exterior film layer.
21. The multi layer thermoplastic film of claim 11, wherein said first layer has a film thickness from about .0001 to about .01 inches and said second layer has a film thickness from about .0001 to about .01 inches.
22. The multi layer thermoplastic film of claim 11, further comprising at least one additional layer comprising thermoplastic elastomer block copolymers, non-elastic polyesters, or a combination thereof.

23. The multi layer thermoplastic film of claim 11, wherein said multi-layered films are fabricated by:

co-extruding said first and second layers;

extruding the first and second layers separately, disposing the second layer on the first layer, and forming the multi-layered film by rolling the first layer and second layer between a heated roller; or

by disposing the first layer and the second layer between an interleaving adhesive layer.

24. A bag for holding a product comprising:

a sealed end;

at least one side wall extending away from said sealed end, each of said at least one side wall having a distal edge; and

an open end defined by said distal edge;

said bag formed from a thermoplastic film comprising:

from about 90 to about 10 weight percent, based on the total weight of said thermoplastic film, of thermoplastic elastomer block copolymers; and

from about 10 to about 90 weight percent, based on the total weight of said thermoplastic film, of non-elastic polyesters.

25. The bag for holding a product of claim 24, wherein said thermoplastic film comprises a blended monolayer thermoplastic film, wherein said blended monolayer thermoplastic film is capable of being use in high temperature heating applications from about 212 degrees Fahrenheit to about 400 degrees Fahrenheit without damaging said product.

26. The bag for holding a product of claim 25, wherein said blended monolayer thermoplastic film is capable of being star sealed.

27. The bag for holding a product of claim 25, wherein said blended monolayer

thermoplastic film has a tensile yield strength of at least 2900 pounds per square inch.

28. The bag for holding a product of claim 25, wherein said blended monolayer thermoplastic film provides an oxygen barrier having a permeability coefficient of less than 100 cc-mil per hundred square inches per day.

29. The bag for holding a product of claim 25, wherein said blended monolayer thermoplastic film provides a water vapor barrier having a transmission coefficient of less than about 20 gms/100 in²/day.

30. The bag for holding a product of claim 24, wherein said thermoplastic film comprises a multi-layered film comprising:
a first layer comprising said thermoplastic elastomer block copolymers; and
a second layer comprising said non-elastic polyesters.

31. The bag for holding a product of claim 30, wherein said multi-layered film is capable of being star sealed.

32. The bag for holding a product of claim 30, wherein said multi-layered film has a tensile yield strength of at least 4000 pounds per square inch.

33. The bag for holding a product of claim 30, wherein said multi-layered film provides an oxygen barrier having a permeability coefficient of less than 100 cc-mil per hundred square inches per day.

34. The bag for holding a product of claim 30, wherein said multi-layered film provides a water vapor barrier having a transmission coefficient of less than about 20 gms/100 in²/day.

35. The bag for holding a product of claim 30 wherein said first layer that comprises an interior film layer and said second layer comprises an exterior layer.

36. The bag for holding a product of claim 30 wherein said first layer has a film thickness from about .0001 to about .01 inches and said second layer has a film thickness from about .0001 to about .01 inches.
37. The bag for holding a product of claim 30 wherein said thermoplastic film further comprises at least one additional layer comprising thermoplastic elastomer block copolymers, non-elastic polyesters, or a combination thereof.
38. The bag for holding a product of claim 24 wherein said thermoplastic elastomer block copolymers are selected from a group consisting of polyester-ester block copolymers, polyether-ester block copolymers, or combinations thereof.
39. The bag for holding a product of claim 24 wherein said non-elastic polyester is the reaction product of a carboxylic acid and a diol.
40. The bag for holding a product of claim 24 wherein the non-elastic polyester is polybutylene terephthalate.
41. The bag for holding a product of claim 24 wherein said thermoplastic film comprises up to about 60 weight percent of non-elastic polyesters, and at least about 40 weight percent of thermoplastic elastomer block copolymers, based on the total weight of said thermoplastic film.
42. The bag for holding a product of claim 24, wherein said thermoplastic film comprises about 50 weight percent of non-elastic polyesters and about 50 weight percent of thermoplastic elastomer block copolymers, based on the total weight of said thermoplastic film.
43. The bag for holding a product of claim 24 wherein said sealed end comprises one of a star seal, a heat seal, or an ultrasonic seal.

44. A method of fabricating a bag comprising the steps of:
- providing a stock of film;
 - twisting or bunching said stock of film using a twisting fixture thereby forming a twisted or bunched portion of film; and
 - sealing said twisted or bunched portion of film with a seal comprising one of a star seal, a heat seal, or an ultrasonic seal.
45. The method of fabricating a bag of claim 44, wherein said twisting fixture comprises the steps of:
- activating an air cylinder;
 - engaging a geared ratchet operatively attached to said air cylinder, said geared ratchet having an elongated member and a length of gear teeth; and
 - articulating at least one twisting member having a gears that are operatively associated with said gear ratchet, a front surface, a back surface, and an aperture formed to receive said wadded tubular stock, said aperture decreasing in circumference from said front surface to said rear surface, between a non-twisted position and a twisted position.
46. The method of fabricating a bag of claim 44, wherein said step of providing said stock of film comprises providing said stock of film comprising:
- from about 90 to about 10 weight percent, based on the total weight of said thermoplastic film, of thermoplastic elastomer block copolymers; and
 - from about 10 to about 90 weight percent, based on the total weight of said thermoplastic film, of non-elastic polyesters to form said thermoplastic film.
47. The method of fabricating a bag of claim 46, wherein said step of providing said stock of film comprises forming said thermoplastic film that is capable of being star sealed.
48. The method of fabricating a bag of claim 46 wherein said thermoplastic elastomer block copolymers are selected from a group consisting of polyester-ester block

copolymers, polyether-ester block copolymers, or combinations thereof.

49. The method of fabricating a bag of claim 46 wherein the non-elastic polyester is polybutylene terephthalate.

50. The method of fabricating a bag of claim 46 wherein said stock of film comprises up to about 60 weight percent of non-elastic polyesters, and at least about 40 weight percent of thermoplastic elastomer block copolymers, based on the total weight of said stock of film.

51. The method of fabricating a bag of claim 46 wherein said step of providing said stock of film comprises providing said stock of film having an insubstantial adherence to meat during cooking applications.

52. The method of fabricating a bag of claim 46 wherein said stock of film comprises about 50 weight percent of non-elastic polyesters and about 50 weight percent of thermoplastic elastomer block copolymers, based on the total weight of said stock of film.

53. The method of fabricating a bag of claim 46, wherein said step of providing said stock of film comprises forming said blended monolayer thermoplastic film capable of being use in high temperature cooking application from about 212 degrees Fahrenheit to about 400 degrees Fahrenheit.

54. The method of fabricating a bag of claim 53 wherein said stock of film has a tensile yield strength of at least 2900 pounds per square inch.

55. The method of fabricating a bag of claim 53 wherein said stock of film provides an water vapor barrier having a permeability coefficient of less than 20 cc-mil per hundred square inches per day.

56. The method of fabricating a bag of claim 53 wherein said stock of film provides an

oxygen barrier having a permeability coefficient of less than 100 cc-mil per hundred square inches per day.

57. The method of fabricating a bag of claim 46, wherein said stock of film comprises a multi-layered thermoplastic film comprising:

- a first layer comprising said thermoplastic elastomer block copolymers; and
- a second layer comprising from said non-elastic polyesters.

58. The method of fabricating a bag of claim 57 wherein said stock of film has a tensile yield strength of at least 4000 pounds per square inch.

59. The method of fabricating a bag of claim 57 wherein said stock of film provides an oxygen barrier having a permeability coefficient of less than 100 cc-mil per hundred square inches per day.

60. The method of fabricating a bag of claim 57 wherein said stock of film provides a water vapor barrier having a permeability coefficient of less than 22 cc-mil per hundred square inches per day.

61. The method of fabricating a bag of claim 57 wherein said first layer comprises an interior film layer and said second layer comprises an exterior layer.

62. The method of fabricating a bag of claim 57 wherein said first layer has a film thickness from about .0001 to about .01 inches and said second layer has a film thickness from about .0001 to about .01 inches.

63. The method of fabricating a bag of claim 57 wherein said multilayered film further comprises adding at least one additional layer comprising thermoplastic elastomer block copolymers, non-elastic polyesters, or a combination thereof.

64. The method of fabricating a bag of claim 46 wherein said stock of film is tubular.

65. A method of fabricating a multilayered thermoplastic film having a first layer comprising from about 90 to about 10 weight percent of thermoplastic elastomer block copolymers, and a second layer comprising from about 10 to about 90 weight percent of non-elastic polyesters, based on the total weight of said thermoplastic film, comprising:

co-extruding said first layer and said second layer to form said multilayered thermoplastic film;

extruding said first layer, extruding said second layer, disposing said second layer on said first layer, and rolling said first layer and said second layer between a heated roller to form said multilayered thermoplastic film, or

disposing an interleaving adhesive layer between said first layer and said second layer.

66. The method of fabricating a multilayered thermoplastic film of claim 65 wherein said multilayered thermoplastic film further comprises at least one additional layer comprising thermoplastic elastomer block copolymers, non-elastic polyesters, or a combination thereof, comprising:

co-extruding said first layer, said second layer, and each of said at least one additional layers to form said multilayered thermoplastic film;

extruding said first layer, said second layer, and each of said at least one additional layers, disposing said second layer on said first layer, disposing each of said at least one additional layers on said second layer, and rolling said first layer, said second layer, and each of said at least one additional layers between a heated roller to form said multilayered thermoplastic film, or

disposing an interleaving adhesive layer between said first layer and said second layer, and disposing an interleaving adhesive layer between said second layer and at least one of said at least one additional layers, and disposing interleaving adhesive layers between each of said at least one additional layers.